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## ABSTRACT

An evaluation report of a workshop conducted by the Office of Research, University of Pittsburgh (May 18-21, 1970) for vocational and special education teachers in the Cincinnati Public Schools is presented. Summary of the workshop, objectives, consultations, inservice workshops, and evaluations by participants and staff are enumerated. Such concerns as a need for more instruction in the use of media, better advance information, workshops of longer duration, and involvement of more nonteaching personnel from related fields were emphasized in the evaluation. As part of the plan for improved capability of the Cincinnati Public Schools to educate the handicapped children, an analysis of the incidence of employment, type of employment, income range, and employer attitude was also conducted. Pupils involved in the study were considered as finished products of the special programs. Introductory and summary parts of the study are included in the report. Persons wanting a copy of the full study are requested to contact Dr. Paul Miller, Superintendent, Cincinnati Public Schools. (CD)

EC031788

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# Evaluation Report Of The Workshop For Vocational And Special Education Teachers, Cincinnati Public Schools

1969 - 1970

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EVALUATION REPORT OF THE  
WORKSHOP FOR VOCATIONAL AND SPECIAL EDUCATION  
TEACHERS, CINCINNATI PUBLIC SCHOOLS  
1969 - 1970

Funded under the Vocational Amendment of 1968  
and Department of Vocational Education  
State of Ohio

UNIVERSITY OF PITTSBURGH  
SCHOOL OF EDUCATION  
OFFICE OF RESEARCH AND FIELD SERVICES

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## INTRODUCTION

The Cincinnati Public Schools, under grants from the Division of Vocational Education, Ohio State Department of Education, embarked on an innovative program to give physically disabled and handicapped students appropriate vocational and pre-vocational education.

The Office of Research and Field Services, University of Pittsburgh, helped Cincinnati in several ways. It provided consultant resources to the Public Schools on the subject of vocational preparation of handicapped children.

The office also, in cooperation with the Division of Special Education, Cincinnati Public Schools, planned and administered an in-service training workshop for a selected group of special and vocational educators. The purpose of this workshop was to help both groups to see their inter-relatedness and to work together to apply the vocational program to disabled and handicapped children, integrating them, when possible, into regular classes. A report on this workshop follows.

Part of the improved capability of the Cincinnati Public Schools to educate disabled and handicapped children depends upon its ability to analyze the incidence of employment of the handicapped, type of employment, income range, and attitude of the employers toward the handicapped. In this connection, Mr. Richard Prisuta, a graduate student assistant in the office, and a doctoral candidate in Special Education completed a pioneering study of the vocational adjustment of former special education pupils in order to determine this aspect of the effectiveness of special education programs. Introductory and summary parts of this study are included in this report. Persons wanting a copy of the complete study and its findings may request it from Dr. Paul Miller, Superintendent, Cincinnati Public Schools.

Without the willing participation and very real contributions of the Cincinnati Public Schools, and particularly the vocational and special educators, none of this work could be useful. Special thanks are due to those at the University of Pittsburgh who worked so hard to make the workshop possible, especially Dr. Godfrey Stevens, and Dr. Jerry Olson, Mr. Francis Gyle, project coordinator, made everything

work well; Mr. William Penn, Supervisor of Special Education in Cincinnati made everything possible; and Superintendent Paul Miller supported the program with such commitment that the initial innovative thrust of the program is most likely to continue in the future.

## PART I

### SUMMARY OF THE WORKSHOP FOR VOCATIONAL AND SPECIAL EDUCATION TEACHERS.

A total amount of \$7,500 was allocated to run a workshop and consultation for vocational and special education teachers. The Office of Research and Field Services, University of Pittsburgh (OR&FS) was contracted by the Cincinnati Public School System to plan, conduct and evaluate this workshop. Representatives of the OR&FS made four on-site visits, three before and one after, in order to provide consultant services in planning the implementation and evaluation of the workshop.

A single four day workshop was held on May 18th to May 21, 1970. The participants were junior and senior high school teachers of vocational education and special education along with ancillary personnel concerned with these special areas of education.

### A-OBJECTIVES

The following objectives were considered congruent with the local needs of the educational community and the objectives of the overall project:

1. To foster in the participants an enthusiasm for and an increased understanding of vocational education.
2. To introduce the participants to the precepts and procedures of vocational and special education.
3. To create an awareness in the participants of the vocational opportunities available to disabled and handicapped people.
4. To accomplish the objectives listed above through a discussion of:
  - a. The definition of vocational and special education.
  - b. The objectives of vocational and special education.
  - c. The methods of implementing vocational education of disabled and handicapped individuals.

- d. The applications of the principles of vocational education to the training of these individuals.
  - e. The techniques involved in including disabled handicapped individuals in regular vocational classes.
5. To evaluate the change in the attitudes of the participants towards the vocational education of handicapped individuals.

#### B-CONSULTATIONS (See Appendices A and B)

In order to coordinate the activities of the OR&FS and the local school administration the following series of meetings was held:

- April 21 - Initial meeting in order to acquaint the representative of the OR&FS with the personnel and operation of the overall project.
- April 30 - Consultation with the Cincinnati staff for the purpose of writing objectives and curriculum planning.
- May 15 - Consultation to evaluate the facilities available in Cincinnati for use in the vocational education of the disabled and handicapped.
- October 9 - Consultation on the effect of the workshop and the initial planning for the next phase of the project.

#### C- INSERVICE WORKSHOPS

The participants were divided into two sections, one section met on Monday and Wednesday; the other section on Tuesday and Thursday. The same program (Appendix B) was presented to both sections. After an initial general session the participants were divided into five sub-groups and rotated through five planned discussion sections. Each session lasted forty minutes. On the second day the same procedure of a general session and a series of group sessions was followed.

TABLE I

## QUESTION 6

What was the most important new information you received in the workshop?

NUMBER OF REPLIES	ATTITUDE*	RESPONSE
12	0	No response
12	+	Innovation is pending in Cincinnati
11	+	How to find and use media materials
9	+	That there can or will be cooperation between the personnel groups representing vocational and special education.
9	+	That such cooperation is getting results elsewhere, outside of Cincinnati.
8	-	Little or nothing new.
5	+	How vocational and special education projects are funded.
4	+	The "systems" approach to vocational education of special pupils.
4	+	Specific information about blindness (or other disability).
2	+	That knowledgeable experts are available to teachers.
2	+	Ideas on counselling the handicapped.
2	?	Reinforcement of my own views.
1	+	This could be + or -!
1	+	Viewpoints of special education teachers.
1	+	How to design specific job training programs.
1	+	That the teacher is becoming more of a counselor in role.
1	+	Community resources available.
1	+	School Board resources available.
1	+	Possibilities for improvement of plant facilities.
1	+	The computer-assisted approach to instruction.
1	+	How to educate employers.
1	+	The importance of the self-concept.
1	-	That one consultant opposes the Cincinnati plan. (This was probably a misinterpretation; we cannot identify the person.)
1	-	That vocational educators are afraid of special pupils.

\* + Indicates a favorable response

- Indicates an unfavorable response



TABLE II

QUESTION 17

What suggestions would you make for improvement in future workshops?

<u>NUMBER OF REPLIES</u>	<u>ATTITUDE*</u>	<u>RESPONSE</u>
19	+	Give more and better advance information to participants on purposes and procedures for such inservice experience. ("They told me Friday to be here Monday; period.")
15	-?	No response
10	+	Have longer periods on such workshops more often.
7	+	Talk more specifically about Cincinnati matters.
5	+	Involve more administrators at all levels.
4	+	Involve business and industry personnel.
4	+	Involve more evenly matched sets of vocational and special teachers in the workshop groups.
4	+	Present shorter, better prepared, more relevant lectures.
4	-	Have less theory.
3	+	Involve more vocational teachers.
3	+	Involve more counsellors.
2	+	Find a place with lower noise level.
2	+	Have more specifics about jobs.
2	+	Have more structure in the workshop.
2	+	Involve university faculty and interested students.
2	+	Have more unstructured groups.
2	+	Involve the pupils and adults of special education classes.
2	+	Add movies and field trips to model programs.
2	-	Responses so incoherent as to defy interpretation.
1	+	Eliminate tables. Get closer together.
1	+	Have more "take home" items.
1	+	Use more local speakers.
1	+	Rotate the groups, rather than the consultants.
1	+	Get more diversity of viewpoint.
1	+	Place more emphasis on special education teaching.
1	+	Display the bibliographic items.
1	+	Add more media material.
1	-	Let special education teachers be consultants; we know all this.(!)
1	-	Get substitutes for our classes. (One school combined classes).

\* + Indicates a constructive suggestion.

- Indicates an unfavorable reaction in the response.

#### D-EVALUATION BY PARTICIPANTS

At the last meeting of a two day session the participants were asked to fill out a questionnaire (Appendix D). Ninety-one of the questionnaires were returned and used in the evaluation of the workshops. Less than ten questionnaires were not returned. The responses to all but two of the questions were overwhelmingly favorable. The replies to the two controversial items numbers 6 and 17 are summarized in Tables I and II.

#### E-EVALUATION BY STAFF.

Five out of the seven staff members outside of the Research and Field Services Office responded to a questionnaire. A summary of the responses is given below:

1a. Was the workshop valuable? Explain.

- A. Yes. Various personnel were involved in the planning. This is necessary to program implementation.
- B. Yes. More advance orientation could have been given to the participants; more communication with administration.
- C. Yes. It seemed to sensitize vocational and special educations teachers to the needs of the other department.
- D. Yes. There was interaction and attitude change.
- E. Yes. Personnel of the two departments got together on common problems.

1b. Was it worth the time you spent? Explain.

- A. Yes. It would have been more worthwhile if teachers and discussion groups had preplanning sessions with the objectives specified. More special education information could have been provided. Administrators should have told the "why and how" of vocational education in Cincinnati.

- B. Yes. Enthusiasm was generated and should be kept alive.
- C. Yes. The workshop was timely and rewarded the staff.
- D. Yes. Though I wish there had been more time.
- E. Yes

2. How would you have improved the workshop?

2a. Contents:

- A. Distribute a list of case studies of vocational education which illustrate successful programs now in operation.
- B. Teachers asked for a follow-up. Was one provided? Have fewer sessions in the morning on account of fatigue.
- C. I would have liked more time for assisting individuals with problems.
- D. Prior knowledge about the participants would have helped the consultants to make presentations more relevant.

2b. Leadership:

- A. Decisions and objectives need to be specified and detailed.
- B. Administrations should have been represented. Obviously only a few were present.
- C. Amiable, effective, and helpful.
- D. Total leadership was excellent.

2c. Organization.

- A. Objectives and overall pattern were not clearly defined. (This member had access to the complete government proposal document up to June 30, 1970.)
- B. Fine!
- C. Participants would have benefitted from a plan at a preliminary meeting.
- D. Excellent. Things ran on time. Treatment and hospitality were beautiful.

2d. Physical Arrangements.

- A. Quite adequate. Rotation of leaders is of questionable value, not allowing for group continuity.
- B. We should not have all met in one room for three days.
- C. Adequate and conducive to the conduct of most aspects. A summary statement by each consultant probably would have been helpful.
- D. The separate rooms on the fourth day were much better.

3. Do you feel that more workshops are needed by the participants? If so, what emphases are needed?

- A. Probably more ideas could be generated if directions were clearer. Teams of teachers, counselors and principals could be used to work on details for a given school, e.g., scheduling teacher assignment, choice of personnel, physical facilities, transportation, with guides on policy provided. "If the central office staff intends to alter the present four track system (Special Education, Basic Education, General Education, Academic Education) to accommodate a working relationship between Special Education and Vocational Education and comply with Ohio State Bill 531 which indicates that 40% of the students will be prepared with vocational skills by 1974, this should be stated and emphasized."
- B. Yes. The "how-to" level could be emphasized. Use of machinery, tools, etc., with occupational therapy, industrial therapy, and vocational rehabilitation consultants, at the departmental or shop level.
- C. Participants could best answer this. Suggestions:
  - i Integration of vocational and special education curricula.
  - ii Behavioral modification techniques.
  - iii Personalized curriculum.
- D. Media help is indicated as a need of the participants.

4. What was the most valuable service rendered by the workshop?

Why?

- A. A vehicle for brainstorming was provided. Participants clearly demonstrated the desire to do a good job.
- B. Opportunity was afforded to re-evaluate attitudes toward the disabled.
- C-D Opportunity was presented to change attitudes toward the "other team". Consultants were seen as non-threatening.

5. Did your own attitudes change about special or vocational education?

How?

- A. No. I feel the need is clear, but overall policy decisions must precede implementation of programs.
- B. Unaffected.
- C. No. Special educators must make the curriculum contents more useful. Vocational educators must learn to accept the special education student and his learning potential.
- D. I discovered that both areas lacked total information on educational media and technology.

6. Other comments were repetitious.

#### F- CONCLUSIONS

From the evaluation by participants and staff, the workshop director draws the following conclusions relevant to this workshop.

- 1. From participants' question #6, 32 respondents indicated uncertainty or no response to what is going on in the system. This response was echoed in the staff comments. 11 persons indicated a need for more instruction in use of media. 18 showed an appreciation of the new directions being charted.
- 2. From participants' question #17, 19 respondents wanted better advance information. 15 did not respond. 10 wanted more workshops of longer duration. 7 wanted to concentrate on Cincinnati specifics. 15 wanted to involve more non-teaching personnel from related fields.

1 and 2 summarize the most frequent reactions given.

3. From staff reactions, there was general agreement that better advance information should be given, and that administration was conspicuously absent. Follow-up and additional time for workshops were recognized as needs. One member particularly expressed concern for an apparent lack of specified objectives and too much non-specific content. All were agreed that the workshop did serve the purpose of opening the questions involved in a non-threatening and mostly interesting experience.

#### G-FOLLOW-UP.

Two staff members of the Research and Field Services Office, the project director and an Educational Research specialist, visited 7 of the Cincinnati Schools in October, 1970, to observe the orientation of administrative personnel in the second phase of the Cincinnati Project, and to plan for a December workshop. The Cincinnati Special Education Supervisor and his assistant also held a conference in this office, after the school visits, to discuss plans and procedures for the next workshop. The Research and Field Service Office will be guided by the most frequently expressed opinions of those who were involved in the May workshop, and also to give due consideration to all opinions expressed wherever they may apply.

## PART II

### A. A FOLLOW-UP STUDY OF AUDITORIALY, VISUALLY, AND ORTHOPEDICALLY HANDICAPPED PUPILS IN CINCINNATI

An analysis of the adult adjustment status of a sampling of recent alumni was felt to be a basis for the construction of an improved curriculum for future auditorially, visually, and orthopedically handicapped pupils. Pupils involved in the study are the finished products of special programs and their adequacy in the world of work was viewed as an indication of program validity and effectiveness.

The writer and four visiting teachers were employed by the Cincinnati Board of Education to directly interview pupils who had completed or otherwise terminated their special education programs within the last three years. The writer expanded the study to include pupils who had terminated programs in the last eight years.

Structured interviews were conducted and analyzed in terms of personal adjustment status of pupils, as well as incidence of employment, kinds of employment, income range, under-employment, employer and employee attitudes, and other pertinent information. This information should be valuable in program evaluation and planning. The Cincinnati Public Schools had not previously conducted a formal and extensive follow-up study of auditorially, orthopedically, and visually impaired pupils.

The writer was employed during May and June of 1970, to arrange the study and gather all the necessary information. Visiting teachers were employed for two and a half hours after school each day and on Saturdays to make door to door visitations with former pupils and their employers from May 1 to June 12, 1970. The visiting teachers utilized a single questionnaire in communicating with the three disability groups. The primary purpose of the study was to locate former pupils who were residing and employed in the Greater Cincinnati Area and acquire information from their employers.

The report and supplementary papers which comprised the Cincinnati School Survey of 1968 suggested that:

There has been no follow-up research on graduates of the Cincinnati Public Schools who enter the world of work. The result has been that the school system does not know how many graduates found employment, what types of employment were available to them, how many graduates actually were prepared for the jobs they took, and how well the vocational courses are adapted to actual jobs either in business or in industry.

The final report of the follow-up study being submitted to Mr. William Penn, Supervisor in the Department of Special Education, provides coverage of the above areas as they relate to three groups of disabled adults.

Research ideas from studies conducted with former educable retarded pupils were utilized, as well as research directly related to deaf, blind, and orthopedically handicapped pupils and adults. Questionnaires for this study were formulated from: an analysis of the questionnaires and reported results of follow-up studies by Dr. Jack C. Dinger, Dr's. Peterson and Smith, Dr. Norman J. Niesen, and Dr. Donald D. Dauwalder. The writer deeply appreciates the valuable assistance received from the Director of Special Education in Cincinnati, Ohio and his excellent staff in acquiring the necessary information and providing direction.

Subjects.--A selection of 130 names was made on the basis of date of birth from a random sampling of 590 total names. The select group consisted of hearing impaired, visually impaired, and orthopedically handicapped subjects. Of the 130 selected names, a total sample population of 73 subjects (56.2%) was able to be located and made up the total study population, and 29 of this group (39.7%) met the criteria of being employed with a measurable wage. All 29 subjects' employers were visited and interviewed.

The following descriptive data was considered to be relative to the group of 24 hearing impaired subjects finally interviewed:

<u>Characteristics</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Number	13	11	24
C. A. Range	16-23 yrs.	19-24 yrs.	16-24 yrs.
C. A. Mean	20.71 yrs.	22.29 yrs.	21.43 yrs.
C. A. Std. Dev.	1.93	1.53	1.92
I. Q. Range	54-113	64-100	54-113
I. Q. Mean	91.23	81.73	86.88
I. Q. Std. Dev.	16.97	10.85	15.38



The narrow range of ages and the wide range in I.Q. for such a small sample of hearing impaired subjects would indicate that this group may not be representative of all young hearing impaired adults. Results should, however, be representative of the community adjustment for such a group, and therefore, significant to Cincinnati educators.

The following descriptive data was considered to be relative to the group of 15 visually impaired subjects finally interviewed:

<u>Characteristics</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Number	8	7	15
C. A. Range	16-22 yrs	16-23 yrs	16-23 yrs.
C. A. Mean	20.55 yrs	20.39 yrs	20.48 yrs.
C. A. Std. Dev.	1.77	1.30	1.57
I. Q. Range	59-136	69-116	59-136
I. Q. Mean	94.38	100.00	97.00
I. Q. Std. Dev.	17.83	16.31	17.36

The following descriptive data was considered to be relative to the group of 34 orthopedically handicapped subjects finally interviewed:

<u>Characteristics</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
Number	17	17	34
C. A. Range	16-24 yrs.	17-24 yrs.	16-24 yrs.
C. A. Mean	21.68 yrs.	21.60 yrs.	21.64 yrs.
C. A. Std. Dev.	2.09	1.00	1.63
I. Q. Range	56-125	56-134	56-134
I. Q. Mean	94.88	83.88	89.38
I. Q. Std. Dev.	20.15	19.57	20.61

Procedure. --Visiting teachers interviewed 73 subjects in their own homes in order to observe their family living conditions and to secure a historical description of the subjects in terms of their educational, military, occupational, marital, financial, social, and personal and home characteristics. Ten pages of questions provided interview consistency. The time required for home interviews ranged from 26 to 90 minutes.

Results and recommendations from interviews with subjects were reported separately for each disability group but in each case they were reported under the following sections: Educational characteristics, military characteristics, occupational characteristics, marital characteristics, financial characteristics, social characteristics,

and personal and home characteristics.

Following the completion of home interviewing, a cover letter and three page employer questionnaire was mailed to the employers of the 29 subjects who were found to be employed in the Greater Cincinnati Area. The three page questionnaire was mailed to employers in order to permit the writer to acquire minimal information in event that an employer might not be willing to permit a direct interview based on an eight page industrial questionnaire. This eight page form was originally used by the United States Employment Service, and was later modified by Dr. Jack C. Dinger for use in his study of post-school adjustment of former educable retarded pupils. The writer acquired this form from Dr. Dinger for use in this follow-up study and made further modifications.

Appointments for interviews were arranged with each of the 29 subjects' employers. Each employer was visited in order to make a job analysis of each job held by the 29 subjects in terms of employment procedures, job responsibilities, working conditions, personal and academic characteristics, advancement possibilities, the feasibility of sponsoring training programs and employing similarly disabled persons in the future, and in terms of the employer's opinion of a designated procedure for providing the actual employment experiences in community and business firms. Three of the employer group failed to return the three page questionnaire; nevertheless, the writer combined the findings from both questionnaires and adjusted for changes in the total number of responses when it became necessary.

The following chart is one example of data resulting from interviews with subjects' employers:

Job Titles	Estimate of Yearly	I.Q.	C. A. (as decimal)
	Gross Wages		
Package Collector	\$ 4160.00	81	21.42
Inside Ring Polisher	4680.00	70	21.25
Mail Clerk	3776.00	99	24.42
Wrapper Helper	3000.00	90	21.17
Key Punch Operator	5200.00	88	23.17

Extractorman-Tumblerman	\$ 4716.00	96	23.00
Clerk	4000.00	83	23.08
Clerk-Typist	3840.00	87	24.33
Assembler	3120.00	64	23.08
Commercial Photographer	4800.00	96	24.25
Box Spring Supplier	6000.00	91	19.83
Teachers Aide	3640.00	82	21.92
Keypunch Operator	5200.00	92	23.58
Teacher	8000.00	134	24.42
Loose Heel Seat Nailing	4600.00	106	21.58
I B M Punch Operator	3536.00	85	24.17
Bookbinder	4500.00	107	23.33
Receiving Inspector	6000.00	115	20.92
Food Handler	3500.00	65	21.75
Bindery Worker	Varies	108	21.67
Clerical Assistant	4775.00	77	22.75
Free Lance Artist	Varies	105	23.92
Piece Worker	600.00	56	20.42
Key Punch Operator	3900.00	85	20.25
Work Activity Center Client	500.00	61	18.33
Food Service Worker	5668.00	54	20.58
Musician	1040.00	86	20.50
Billing Clerk	5072.00	107	23.42
Cashier	5252.00	100	23.50

## B - CONCLUSIONS AND RECOMMENDATIONS

The majority of former hearing impaired, visually limited, and orthopedically handicapped pupils of the Cincinnati Public Schools are capable of successful occupational adjustment to unskilled and semi-skilled jobs. Nevertheless, the majority of disabled adults in this study have at some time been employed but are currently not self-supporting and are dependent upon their parents. They were victims of impractical school experiences which were not marketable enough to provide economic stability. This statement was made only after applying the following formula to the subjects of each disability group in the study to determine whether financial investments for education and training were yielding proper results:

(Mean No. of Yrs. in Sp. Ed. per Pupil Per Group) X (Estimated Annual Program Expenditure Per Pupil Per Group),

The total current expenditure per crippled pupil at Condon School for the year ended June 30, 1969 was \$1884.00. The average number of years spent at Condon School was 8.5 for subjects in this study. If the current annual expenditure is used as a basis for calculation, the total estimated expenditure for educating a crippled pupil at Condon was \$16,014.00. Of the 34 Ss in this study for which this amount was paid for the purpose of permitting each pupil to reach his or her maximum potential, only 13 Ss (38%) are presently employed.

An estimated \$2,517.00 was spent annually to educate each of the 24 hearing impaired subjects in this study for a mean number of 10.5 years, and therefore, an estimated total expenditure of \$26,429.00 was made to educate and train each subject. Fifty per cent of the hearing impaired subjects are presently employed.

Visually limited subjects were educated at an estimated annual cost of \$2,289.00 for a mean number of 7.5 years and at a total cost of \$17,168.00 per pupil. Of the 15 Ss in this group, only 4 (27%) are presently employed.

Group socialization was a stronger characteristic of the entire sample population than the writer had expected and those subjects who

have remained in the Greater Cincinnati Area are not at odds with employers or fellow employees and seem to be quite aware of community problems. There was no specific evidence of labeling or discriminatory behavior on the part of subjects' employers. Employers appeared to make reasonable demands upon disabled employees and approximately three-fourths of them were willing to consider pupils with similar disabilities for employment provided the schools had sufficiently trained them for the job.

The administration should improve their relationships with all professional agencies and with those agencies capable of assisting former pupils who are unemployed. The school should assume more responsibility for the occupational placement of disabled pupils after they have completed their training. The first few months of employment should be looked upon as part of the school program. None of the former pupils in this study had been specifically trained in a vocational program for a specific job and none of them were placed solely through the efforts of the school. Those programs observed by the writer were primarily academic in nature.

Almost half of the employed group of subjects had no job advancement opportunity without further training. This was primarily because the nature of their jobs required no arithmetic process to perform higher than addition and extremely limited opportunity to perform reading or writing skills. It appears that contented employees on jobs requiring limited communication and computational skills were destined to stay in low-level positions.

Intelligence and job seniority are generally considered to be positively related to job success as measured by wages. However, these variables cannot be viewed as the major criteria of job success. Employers indicated that personal characteristics such as desirable reaction to criticism, getting along with other employees, not being late for work, memory for directions, work effort, and attention to company regulations were the primary requisites for occupational success.

Special education teachers, vocational educators, and industrial arts personnel should be provided with a copy of the results of this study in order to develop more complete long term concepts of various disabled adults performing as workers and citizens. Active team

participation in the formulation of questions prior to subsequent studies, and in the implementation of suggestions from the present study would benefit the curriculum.

The follow-up study indicated the employer had a low tolerance level for the basic sources of human error such as carelessness and indifference; however, he was prepared to remedy situations caused by ignorance, confusion and work pressures. The individual was expected to know reasonably well what he was supposed to do, preferably in terms of the end-product. He was expected to have a clear understanding of his basic responsibilities and duties and their limitations.

The scope of the pre-vocational training program must be expanded to augment the employer's receptivity to established objectives and to meet changing demands in the labor market and in the school system. Corrective action must be taken to eliminate or avoid the negative features caused by obsolescence or the disadvantages of inadequate implementation. Emphasis must be placed on the need to know in advance what the employer expects should be accomplished and what will constitute good performance.

The Cincinnati School System has the management, methods, funds, facilities and materials to develop a dynamic program of vocational education for the business community. The following pre-requisites are offered for consideration:

1. Gather facts and information about the technical and managerial problems that concern the prospective employer of the disabled.
2. Establish programs, plans and procedures which develop the individual's knowledge of job requirements and provide information to the employer regarding problems inherent in the employment of the disabled.
3. Distribute a curriculum guide to explain and interpret pre-vocational programs so that the employers interest and enthusiasm is developed and maintained.
4. Analyze the existing student-trainee programs and revise them to include better general education for the vocationally oriented in order to relate to the employer's specialty.

The following suggested procedure provides the disabled student with a gradual adjustment to the world of work as well as an opportunity for exposure to a variety of employment settings. It also provides the vocational instructor with an objective means of evaluation:

1. Locate a business firm which has the kind of operation and supervision necessary to provide adequate training jobs for the student.
2. Convince the employer of the value of a job training program to both the business and the student. The employer should accept each student-trainee for a short period of training.
3. Evaluate the student-trainee's progress through personal observation by the work-study coordinator and the employer, and self-evaluation by the student. This would be provided for regularly through the completion of rating forms.
4. Establish the student-trainee in approximately four job training experiences of short duration.
5. Employer's final evaluation and writing of a letter of recommendation for the student-trainee, which greatly facilitates the securing of employment after completing school.

An on-the-job training program exists for E.M.R's, however, access to this program is not ordinarily available for the students involved in this study. The students involved in this study were primarily trained, if anything, to go on to college or to receive more training. Recently efforts towards a more symbiotic relationship between vocational education and special education in Cincinnati indicates the possible development of a prototype for other large city systems in Ohio and elsewhere.

In the existing vocational programs for special students there is a dropping out of students somewhere between the elementary grades and grade 12, due to leaving school, switching programs, moving, etc. This situation leaves few students who survive from original work study program indoctrination to completion of upper level vocational education programs, and shows ineffective use of funds and manpower. There appears to be a real need for: 1) specific program objectives which pair specific skills with specific job opportunities as based on actual employment situations of former pupils; 2) determination of the exact level at which subjects who do not continue in the work study program are leaving the program; 3) justification for the inclusion of disabled groups in vocational programs based on their positive individual assets and on need rather than costs; 4) abolishment of independent vocational programs instructed by special education teachers; 5) larger numbers of students to fill the greater number of jobs available and reduce the current possibility of placing students on various jobs

before they are totally prepared.

The varied programs (due to greater total incidence of deaf, blind, and crippled pupils) of the city school system tend to serve the entire Greater Cincinnati Area, the county as well as the city. The level of state financial support in proportion to the cost of special education places Cincinnati in an unfavorable financial position. The state should revise the financial reimbursement formula to pay a larger proportion of the total cost of these programs. The heavy financial burden presently being borne by the Cincinnati Public Schools can be shared by the county school system which has the legal and operational capability to conduct special educational programs.

Vocational education should be decentralized from Courter Technical High School to truly comprehensive local high schools. The implementation of vocational education programs for disabled pupils should be primarily the responsibility of vocational education officials with cooperation and assistance from the Department of Special Education.



## APPENDIX A

### WORKSHOP CONSULTANTS VOCATIONAL EDUCATION FOR THE HANDICAPPED CINCINNATI PUBLIC SCHOOLS

Berner, Robert	Director, Title III Project, Innovative Curriculum for Special Education, Allegheny County Schools, Pennsylvania B.S. - Indiana University, Pennsylvania M. Ed. - Duquesne University Post Master studies in administration, University of Pittsburgh, Ph.D., 1970. Formerly Director of Curriculum and Instruction, Canton Township and Elementary Supervisor, Stow-Rox, Pennsylvania School Districts.
Bregman, Morton	A.B., University of Buffalo M.A., Teachers College, Columbia University Ph. D. studies at New York University Assistant Executive Director, Vocational Rehabilitation Center, Pittsburgh; Instructor, University of Pittsburgh Formerly Regional Rehabilitation Services Coordinator, Syracuse University Hospital Formerly Chief Coordinator, Institute for the Crippled and Disabled, New York, N. Y.
Evans, Philip	Assistant Superintendent, Keystone Oaks School District, Pittsburgh, Pennsylvania Assistant, Research and Field Services Office, University of Pittsburgh, Ph.D., 1970. B. S. - Edinboro State College, Pennsylvania M. Litt. - University of Pittsburgh Post Master studies at University of Pittsburgh Formerly Director of Research and Planning, Keystone Oaks School District Principal, Greentree School District, Pittsburgh
Fernekes, Thomas	University of Pittsburgh Teacher Corps, Instructional Media Specialist B.S. - Clarion State College, Pennsylvania NDEA Fellow, Pennsylvania State University M. Ed. - University of Pittsburgh Formerly Graduate Student Assistant, University of Pittsburgh Guild for the Blind

Gyle, Francis

Fellow, University of Pittsburgh, Special Education & Rehabilitation  
B. A. - University of California, Berkeley  
Theological Diploma - Concordia Seminary, St. Louis  
M. Ed. - University of Pittsburgh  
Health Education & Welfare Workshops in Rehabilitation of the Deaf, Gallaudet College and Oregon College of Education  
Workshops in Child Care Supervision, University of North Carolina, Chapel Hill  
Formerly Counselor and Dean of Students, Florida School for the Deaf.

Loomis Chester

Supervisor, Section on Mental Retardation and World of Work, Department of Special Education, Detroit Public Schools.  
Formerly Coordinator, United States Office of Education Project #178, research on 400 mentally retarded post graduates and 100 regular post graduates from public schools.  
Director of Juvenile Detention School and Hospital Schools Program, Detroit.

Mauch, James

Director, School of Education, Office of Research & Field Services.  
B.A. - Bowling Green University, Ohio.  
M.A. - Middlebury College, Vermont.  
M.A.T. - Ed.D. - Harvard University.  
Formerly Director of Program Development Branch, Bureau of Elementary & Secondary Education, U.S. Office of Education.  
Staff Associate, Boston School Study.

Murphy, John

B.S., Boston University.  
M.A. University of Rhode Island.  
Formerly Associate University of Rhode Island Researcher, Curriculum Research and Development Center.  
Fellow, University of Pittsburgh, Office of Research and Field Service.

Olson, Jerry

Assistant Superintendent of Systemwide Programs, Office of Occupational, Vocational and Technical Education, Pittsburgh Public Schools.  
B.S. - California State College, Pennsylvania.  
M. Ed. - University of Pittsburgh.  
Ph. D. - Ohio State University .  
Formerly Instructor, College of Education, Ohio State University.  
Industrial Arts Teacher.

- Poehlmann, Mary  
 B.S. - Carnegie-Mellon University.  
 M.S. - Ohio State University.  
 Post Graduate work at the University of  
 Pittsburgh and Carnegie-Mellon University.  
 Associate Director, Curriculum and Development,  
 Occupational, Vocational and Technical Education,  
 Pittsburgh Board of Public Education.  
 Formerly Curriculum Supervisor and Curriculum  
 Assistant, Pittsburgh Board of Public Education.
- Seifried, Julianne  
 Counselor, Community and Counseling Center  
 for the Deaf, Wilkinsburg, Pennsylvania.  
 B.S. - West Virginia University.  
 M. Ed. - University of Pittsburgh.  
 Diploma Specialist in Education and  
 Rehabilitation of the Deaf.  
 Formerly Secretary, Production Department,  
 U. S. Steel, Pittsburgh.  
 Head of the Commercial Department, Woodbury  
 High School, New Jersey.
- Stevens, Godfrey D.  
 Professor of Education and Coordinator of  
 Administration Training with joint appointment  
 in the Program of Information Science, Department  
 of Special Education and Rehabilitation,  
 University of Pittsburgh.  
 B. Ed. - Milwaukee State Teachers College.  
 M. Phil. - University of Wisconsin School of  
 Education.  
 Ed. D. - Teachers College, Columbia University.  
 Post Master studies at University of Cincinnati.  
 Formerly Lecturer, University of Cincinnati and  
 Fulbright Lecturer, Auckland, New Zealand and  
 Director, Southeast Section, Medicine and  
 Science, United Cerebral Palsy Association.
- Young, Earl B.  
 Assistant Professor and Coordinator of  
 Programs in Mental Retardation, Department of  
 Special Education and Rehabilitation, University  
 of Pittsburgh.  
 B.A. - M.A. - Wayne State University.  
 Ph. D. - University of Michigan.  
 Formerly Director Special Education and  
 Vocational Rehabilitation Program, (SEVR)  
 and School Administrator, Detroit Public Schools.

APPENDIX B.  
WORKSHOP PROGRAM  
VOCATIONAL EDUCATION - SPECIAL EDUCATION  
THE CINCINNATI PUBLIC SCHOOLS  
DR. PAUL A. MILLER, SUPERINTENDENT

Monday - Tuesday - May 18, 19, 1970, 8:30 a.m. - 11:00 a.m.  
12:00 noon - 3:30 p.m.  
Wednesday - Thursday - May 20, 21, 1970 8:30 a.m. - 3:30 p.m.

Registration  
Preliminaries

MONDAY

"NEW DIRECTIONS IN SPECIAL EDUCATION." DR. GODFREY STEVENS

"STRUCTURING FOR VOCATIONAL EDUCATION." DR. JERRY OLSON

TUESDAY

WELCOME DR. PAUL A. MILLER

"NEW DIRECTIONS IN SPECIAL EDUCATION." DR. GODFREY STEVENS

"STRUCTURING FOR VOCATIONAL EDUCATION." DR. JERRY OLSON

GROUPS MEET WITH CONSULTANTS

LUNCH

"MEANINGFUL LEARNING SITUATIONS." DR. EARL YOUNG

GROUPS MEET WITH CONSULTANTS

WEDNESDAY - THURSDAY

"REALISTIC TRAINING FOR JOB SPECIFICS." DR. CHESTER LOOMIS

GROUPS MEET WITH CONSULTANTS

LUNCH

SUMMARY QUESTIONNAIRE

APPENDIX C  
Cincinnati Public Schools

Vocational Education - Special Education

Workshop Questionnaire

Directions: Please complete and return to the  
Education Center, Div. of Special Education  
via "PONY"

1. What is your area of specialization? \_\_\_\_\_
2. Did your discussion group consist of both special educators and vocational educators? Yes \_\_\_\_\_ No \_\_\_\_\_
3. Were the group discussions beneficial? Yes \_\_\_\_\_ No \_\_\_\_\_ Explain why or why not \_\_\_\_\_  
\_\_\_\_\_
4. Did this workshop explore the Vocational possibilities for handicapped youth? Yes \_\_\_\_\_ No \_\_\_\_\_ In what way \_\_\_\_\_  
\_\_\_\_\_
5. Has this workshop stimulated ideas about Vocational Education that can be directly applied to Cincinnati? Yes \_\_\_\_\_ No \_\_\_\_\_ Please be specific: \_\_\_\_\_  
\_\_\_\_\_
6. State the most important new information you received by attending this workshop \_\_\_\_\_  
\_\_\_\_\_
7. Was the information presented by speakers? Directly Applicable \_\_\_\_\_  
Theoretical \_\_\_\_\_
8. Did this workshop increase your awareness of the possibilities of Vocational Education for handicapped youth? Yes \_\_\_\_\_ No \_\_\_\_\_ In what way \_\_\_\_\_  
\_\_\_\_\_

9. Are you better acquainted as a result of this workshop with the vocational opportunities for handicapped people? Yes \_\_\_\_\_ No \_\_\_\_\_ Give an example of the opportunity available. \_\_\_\_\_
10. Did you learn about procedures of Vocational Education for the handicapped? Yes \_\_\_\_\_ No \_\_\_\_\_ Give a procedure for implementing such a program. \_\_\_\_\_
11. Would you have preferred a description of on-going programs within Cincinnati prior to the workshop? Yes \_\_\_\_\_ No \_\_\_\_\_
- Which? Vocational Ed. \_\_\_\_\_ Sp. Ed. \_\_\_\_\_ Ins. Arts. \_\_\_\_\_
- Counseling \_\_\_\_\_ Administration \_\_\_\_\_
12. Would you be willing to take an introductory course in an area other than Vocational Education? Yes \_\_\_\_\_ No \_\_\_\_\_
- Special Education? Yes \_\_\_\_\_ No \_\_\_\_\_
13. Audio-Visual observations of handicapped in the world of work would have been Important \_\_\_\_\_ Not Important \_\_\_\_\_
14. Inclusion of handicapped students at group discussions would have been Important \_\_\_\_\_ Not Important \_\_\_\_\_
15. Can the handicapped be integrated in Vocational Education classes? Yes \_\_\_\_\_ No \_\_\_\_\_ Why or Why Not \_\_\_\_\_
16. Give your opinion of teaching the following to handicapped pupils who will leave school before graduation:
- |   | Important | Not Important |
|---|-----------|---------------|
| Learning about the jobs available throughout the Nation | _____     | _____         |
| Learning what is required to get and keep jobs.         | _____     | _____         |
| Learning skills for various jobs (machines etc.)        | _____     | _____         |

16. (cont.)

	Important	Not Important
Measuring the aptitudes and abilities of each pupil to compare these with job requirements	_____	_____

Learning to work through having jobs in school	_____	_____
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Learning to work by part-time training in the city	_____	_____
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17. In your opinion how could this workshop have been improved \_\_\_\_\_

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SIGNATURE \_\_\_\_\_